MT.310.10

STATE OF MICHIGAN

DEPARTMENT OF NATURAL RESOURCES

In the Matter of

Groundwater dewatering devices, maintenance, leachate storage lagoons, monitor wells, monitoring, engineering plans and liner installation at the Plainfield Landfill operated in Plainfield Township, Kent County, by the Kent County Department of Public Works



CONSENT AGREEMENT

This agreement is between the Michigan Department of Natural Resources (hereinafter referred to as the Department) and the Kent County Department of Public Works, Owner of the Plainfield Landfill (hereinafter referred to as the Owner).

Whereas, the Owner operates a solid waste disposal area eligible for licensure under the provisions of Act 87, P.A. 1965, as amended, and

Whereas, the staff of the Department alleges that the operation of this facility at this location is such that the water and other natural resources of the state may be endangered, and

Whereas, the staff of the Department specifically alleges that the operation of this facility is such that lack of proper subsurface water control may cause operational and maintenance problems and excessive leachate generation that would have to be treated, and

Whereas, the construction design has been modified in some instances from the original plans on file, and

Whereas, the staff of the Department has reasonable grounds to believe that the liner of the storage lagoon has not been installed as proposed, and

Whereas, the staff of the Department and the Owner during recent consultations, inspections, and on-site evaluations have mutually concluded that the expeditious evaluation of the facility and implementation of design and operational modifications to correct the deficiencies is essential to the proper operation of the site and is necessary to prevent unlawful pollution of the waters of the state and to maintain the integrity of the landfill.

Now therefore, the Owner and Department hereby and herewith consent and agree as follows:

- 1. The proposed design for the construction of the required dewatering system to facilitate lowering and permanent maintenance of the water table at least 7' (seven feet) below the bottom of the refuse cell in the southern part of the disposal site shall be submitted for review and approval to the Resource Recovery Division prior to February 1, 1979.
- 2. The construction and installation of the dewatering system for the south side of the facility shall be completed no later than June 30, 1979 or within 120 days following written approval of submitted plans. Every effort shall be made to provide a northerly discharge. The east-west dewatering trench to be installed on the north side of the facility shall also be installed within the same time frame as stated within this stipulation should the permanently established piezometric surface require its installation.
- 3. The groundwater dewatering devices installed below the cell liners that discharge into the north-south leachate collection system shall be eliminated and sealed within 30 days of completion of the dewatering system to serve the south side of the landfill referred to in stipulation 2.
- 4. The lowest section, or that part of the leachate collection manholes which are below the P.V.C. liner, shall be cleaned of all debris and sealed to eliminate the possibility of leachate from entering the groundwater and/or groundwater elimination system prior to March 1, 1979. The access pipe for the dewatering devices installed below some of the cells shall remain unobstructed until the southern dewatering system is installed. Engineering plans shall be submitted to the Resource Recovery Division for review prior to February 1, 1979 depicting the method of sealing a typical manhole.
- 5. The leachate storage pond located on-site shall be lined with reinforced hypalon, as previously agreed, prior to March 31, 1979. Engineering plans shall be submitted for review to the Resource Recovery Division depicting the method of sealing between the liner and leachate access pipe prior to February 1, 1979. A contingency plan for handling of leachate shall be developed including data for the connection to the county sanitary sewer system. A method shall be developed to maintain

the integrity of the hypalon liner.

- 6. Based on the permanently established piezometric surface of the shallow aquifer, additional wells in the down gradient direction shall be installed for the long-range monitoring program. Engineering plans establishing the permanent piezometric surface shall be submitted for approval to the Resource Recovery Division prior to December 15, 1978. Plans shall be submitted depicting the proposed locations and depths of additional monitoring wells in the down gradient direction of groundwater flow prior to February 1, 1979. (Staff will assist in determining suitable locations)
- 7. Until such time as the permanently stabilized piezometric surface is established with the concurrence of the Resource Recovery Division, each trench shall be evaluated and approved by this office prior to the placement of refuse in the cell.
- 8. The Kent County Board of Public Works shall establish a quarterly groundwater sampling program utilizing existing wells to be designated by the Resource Recovery Division for monitoring purposes and new wells to be installed for the following routine parameters: COD, pH, Nitrate-Nitrogen, Ammonia-Nitrogen, T.D.S., Cl, Mg, NA, K, CA, Fe, Pb, Ni, Zn, Cr, Cd, and hardness as CaCo₃.
- A complete set of as-built engineering plans shall be developed, certified and submitted to the Resource Recovery Division prior to March 30, 1979.
- 10. The Owner shall notify the Resource Recovery Division at least two days prior to the placement of clay and PVC liners and other phases of construction included within this order.

This Consent Agreement, which will become a part of the license stipulations for 1979, is entered into in lieu of administrative hearings or other remedies and the Owner agrees to be bound by the schedules and conditions contained herein.